



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D3319-3
Job Sheet 188875



Part No: D3319-3

Job Qty: 12 ea

Part Name: Full Length Wearplate



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/16/19

Job Tracking No:

Due Date: 1/31/19

Created By: Dara Macdonald

Type: Stock

Description:

Note: IPP: A 05.05.12 New issue KJ/JLM IPP Rev:B Now on Waterjet 06-10-03 JLM IPP REV:C 17.10.25 AS PER DWG REV.D DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Waterjet - Flow - 1	6 pcs	1/31/19	1/31/19	0.00	1.40	Waterjet - Flow		DL 19/02/01
110	QC	6 pcs	1/31/19	1/31/19	0.00	0.00	QC2 Waterjet-2		DL 19/02/01
120	QC	6 pcs	1/31/19	1/31/19	0.00	0.00	QC8-2		DL 19-02-13
140	Brake NC	12 pcs	1/31/19	1/31/19	0.12	0.84	Brake NC 1		SL 19/02/19
150	QC	12 pcs	1/31/19	1/31/19	0.00	0.00	QC5		FEB 2 0 2019 68
160	Autoweld 1	12 pcs	1/31/19	1/31/19	0.00	3.82	Automated welding		DAS 19/02/19 9-89
170	QC	12 pcs	1/31/19	1/31/19	0.00	0.00	QC10		24 Cpl
180	QC	12 pcs	1/31/19	1/31/19	0.00	0.00	QC5		9-89 Cpl
190	SprayPaint	12 pcs	1/31/19	1/31/19	0.00	1.20	Spray Paint		9-89 DAS 19/02/19 9-89
200	QC	12 pcs	1/31/19	1/31/19	0.00	0.00	QC3		40 DAS 19/02/22
210	Packaging	12 pcs	1/31/19	1/31/19	0.00	0.00	Packaging3-1		40 9-89
220	QC21-SA	12 Ea	1/31/19	1/31/19	0.00	0.00	QC21		21 9-89 FEB 2 5 2019

Part Op 100 - 1-Cut as per Dwg D3319 Dwg Rev: D Prog Rev: D 2-Deburr if necessary
Descriptions: 140 - Form using DT8326 & DT8261 as per Dwg D3319

160 - 8259 Hardcoat Rod

190 - COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURE COATING AS PER DWG NOTE 9 SHEET ONE.

BATCH: Rock Guard #5147896 EX 1/20
210 - Identify on inside surface using a permanent fine point marker with the following:

Job BOM

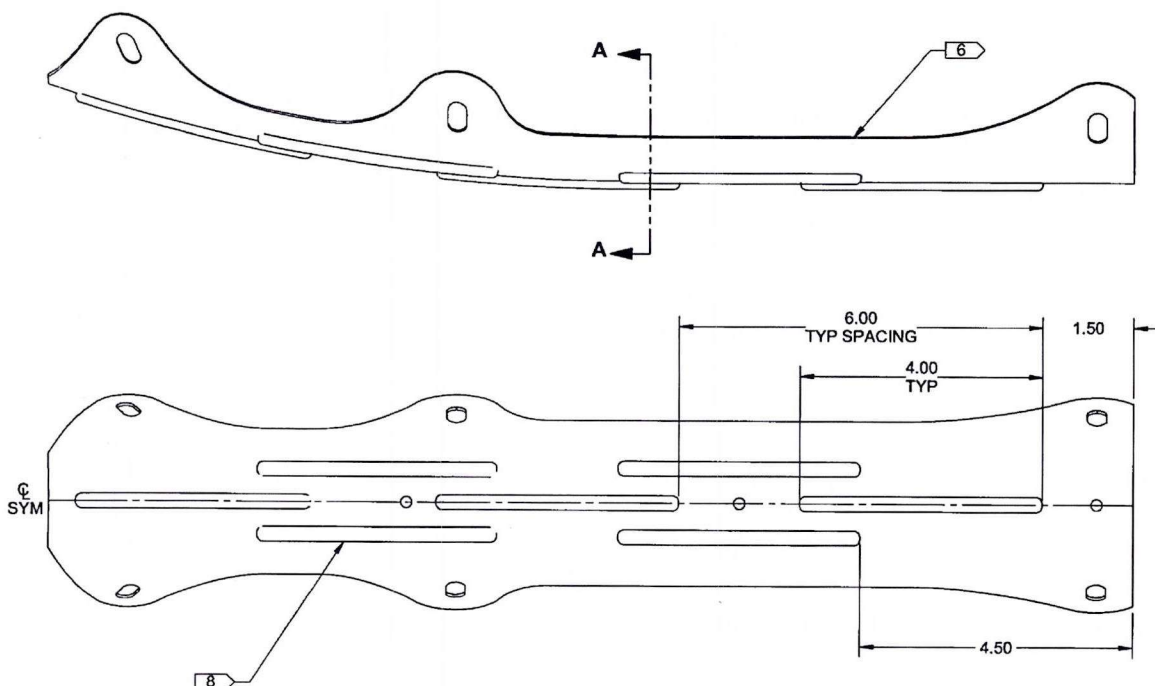
Part / Item	Component Name	Quantity	Operation	Container
M304S18GA	304/316 .050 Sheet	19.5000 sf (3.25 ea)	100-Waterjet - Flow - 1	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Waterjet - Flow - 1	M304S18GA	20	168	0

Part Specifications					
Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Wearplate	0.190inches + 0.005 - 0.001	0.195 0.189		
2	Wearplate	0.500inches + 0.006 - 0.001	0.506 0.499		
3	Wearplate	0.316inches ± 0.010	0.326 0.306		
4	Wearplate	0.607inches ± 0.010	0.617 0.597		
5	Wearplate	2.940inches ± 0.030	2.970 2.910		
6	Wearplate	2.690inches ± 0.030	2.720 2.660		
7	Wearplate	3.527inches ± 0.010	3.537 3.517		
8	Wearplate	4.520inches ± 0.030	4.550 4.490		
9	Wearplate	5.063inches ± 0.010	5.073 5.053		
10	Wearplate	6.160inches ± 0.030	6.190 6.130		
11	Wearplate	0.600inches ± 0.030	0.630 0.570		
12	Wearplate	8.690inches ± 0.010	8.700 8.680		
13	Wearplate	30.790inches ± 0.010	30.800 30.780		
14	Wearplate	52.880inches ± 0.030	52.910 52.850		
15	Wearplate	62.770inches ± 0.010	62.780 62.760		
16	Wearplate	74.420inches ± 0.010	74.430 74.410		
17	Wearplate	75.520inches ± 0.030	75.550 75.490		
18	Wearplate	0.050inches ± 0.010	0.060 0.040		

Plex 1/16/19 11:13 AM Dart.Macdonald.Dara



D3319-1 WEARPLATE
MAKE FROM D3319-1BND

RELEASED

2017 AUG 10
REV 17.614

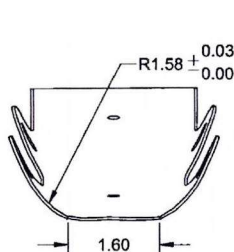
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3319-1" PER QSI 044 6.1
- 7) WEIGHT: 1.09 lbs
- 8) BUILDUP HARD SURFACING 0.06 TO 0.13 THICK USING 8259 ROD PER QSI 004 SECTION 4.5 (AUTOMATED WELDING) OR BUILDUP HARD SURFACING 0.06 TO 0.13 THICK USING 2059B ROD PER QSI 004 SECTION 4.1 (MANUAL WELDING)
- 9) COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURED COATING 0.020-0.040 THICK, PER DART QSI 005 4.9

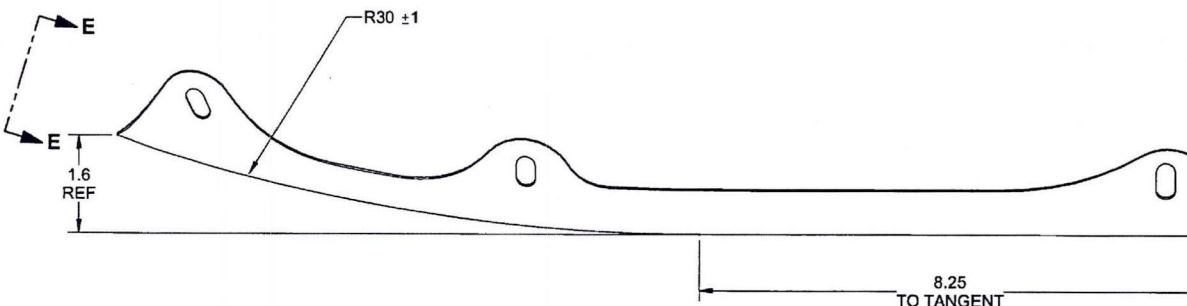
D	REVISE DRAWING TO SOLIDWORKS FORMAT, UPDATE NOTES, ADD ROBOTIC WELDING PROCESS, UPDATE TOLERANCES TO REFLECT INSPECTION CAPABILITY, CHANGE DRAIN HOLE LOCATION D3319-1, 12.00 WAS 12.600 (ZN BS-2), CHANGE WELD, PATTERN AND ADD MISSING DRAIN HOLES D3319-1/3, CHANGE MTL TO SS 304/316, ADDED D3319-XBND, SECTION VIEW F-F, AND UPDATED VIEW E-E ADDED DETAIL D, I, P	SAD	17.05.09
C	UPDATE TO CURRENT STANDARDS IAW QSI 043; CLOSED AFTMOST HOLE OF -3/-5/-7 (REF DETAIL G) SEE NCR 12-547	MB	12.03.13
B	WIDEN HOLES, REDUCE WIDTH OF -3/-5/-7	PH	05.06.06
A	NEW ISSUE	PH	04.09.24
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SAD		
CHECKED	AJS	DRAWING NO.	REV. D
MFG. APPR.	DP	D3319	SHEET 1 OF 8
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	WEARPLATE	NTS
DATE	17.05.09	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

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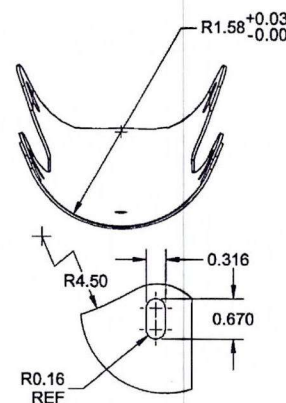
8 7 6 5 4 3 2 1



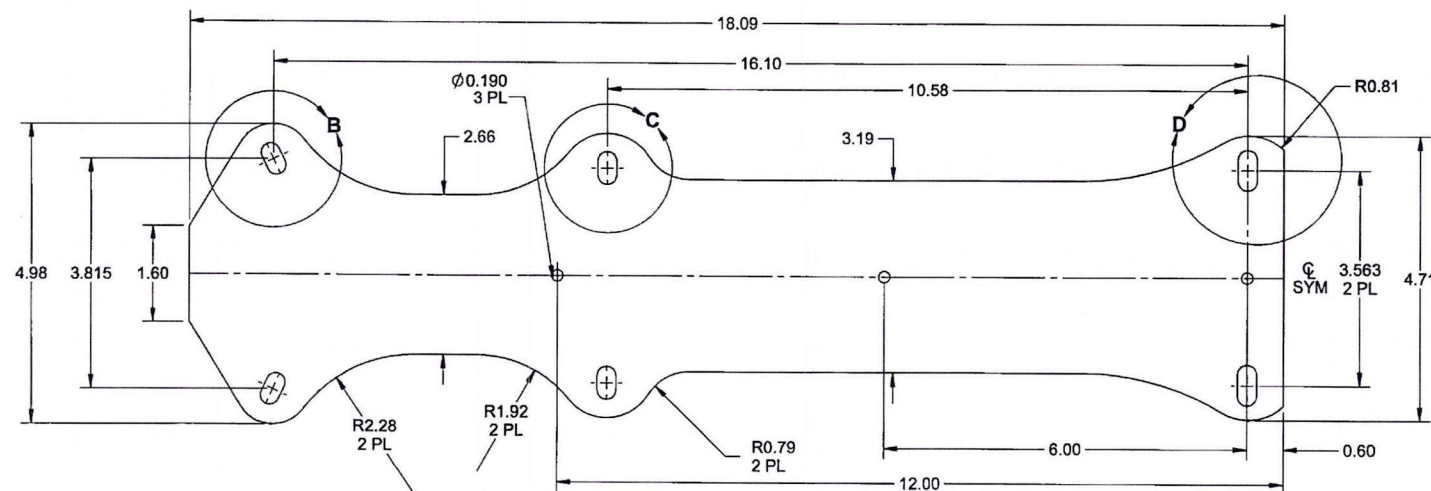
VIEW E-E



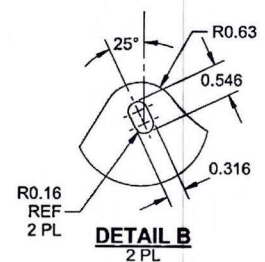
D3319-1BND WEARPLATE
MAKE FROM D3319-1F



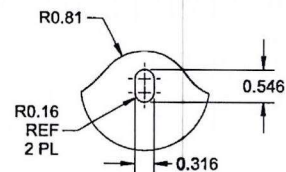
DETAIL D
2 PL



D3319-1F WEARPLATE
FLAT PATTERN



DETAIL B
2 PL



DETAIL C
2 PL

NOTES:

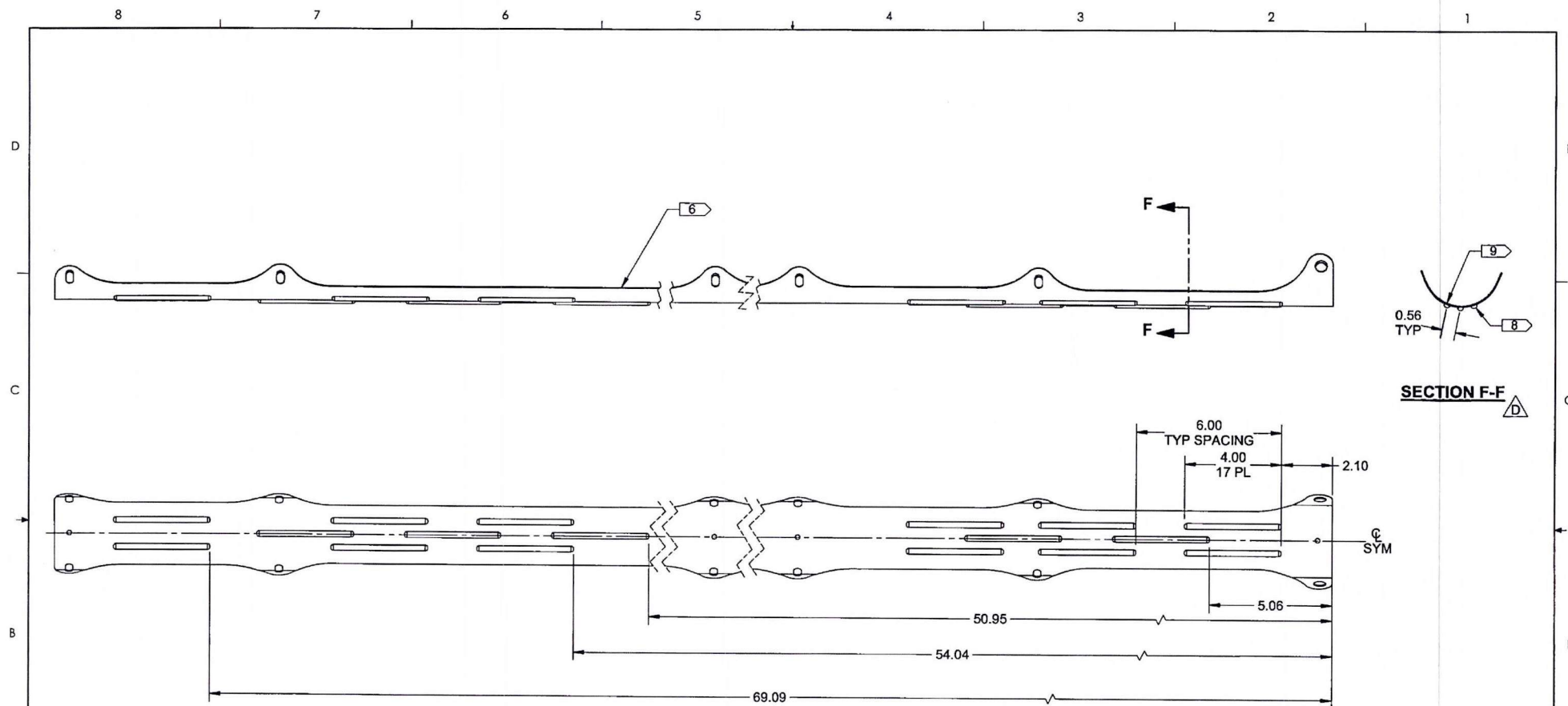
- 1) MATERIAL: AISI 304/316 SS SHEET ANNEALED, 18 GAUGE (0.048 THICK)
PER MIL-S-5059 OR AMS 5513 (304)
OR AMS 5524 (316) OR ASTM A240 OR ASME SA240
REF DART SPEC M304S18GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.84 lbs
- 8) FOR NON-DIMENSIONED FEATURES, REFER TO CAD FILE D3319-1F-REV.D.XF

RELEASED
2017 AUG 10

APPROVED

DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SAD		
CHECKED	AJS	DRAWING NO.	REV. D
MFG. APPR.	DP	D3319	SHEET 2 OF 8
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	WEARPLATE	NTS
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8 7 6 5 4 3 2 1



D3319-3 WEARPLATE
MAKE FROM D3319-3BND



NOTES:

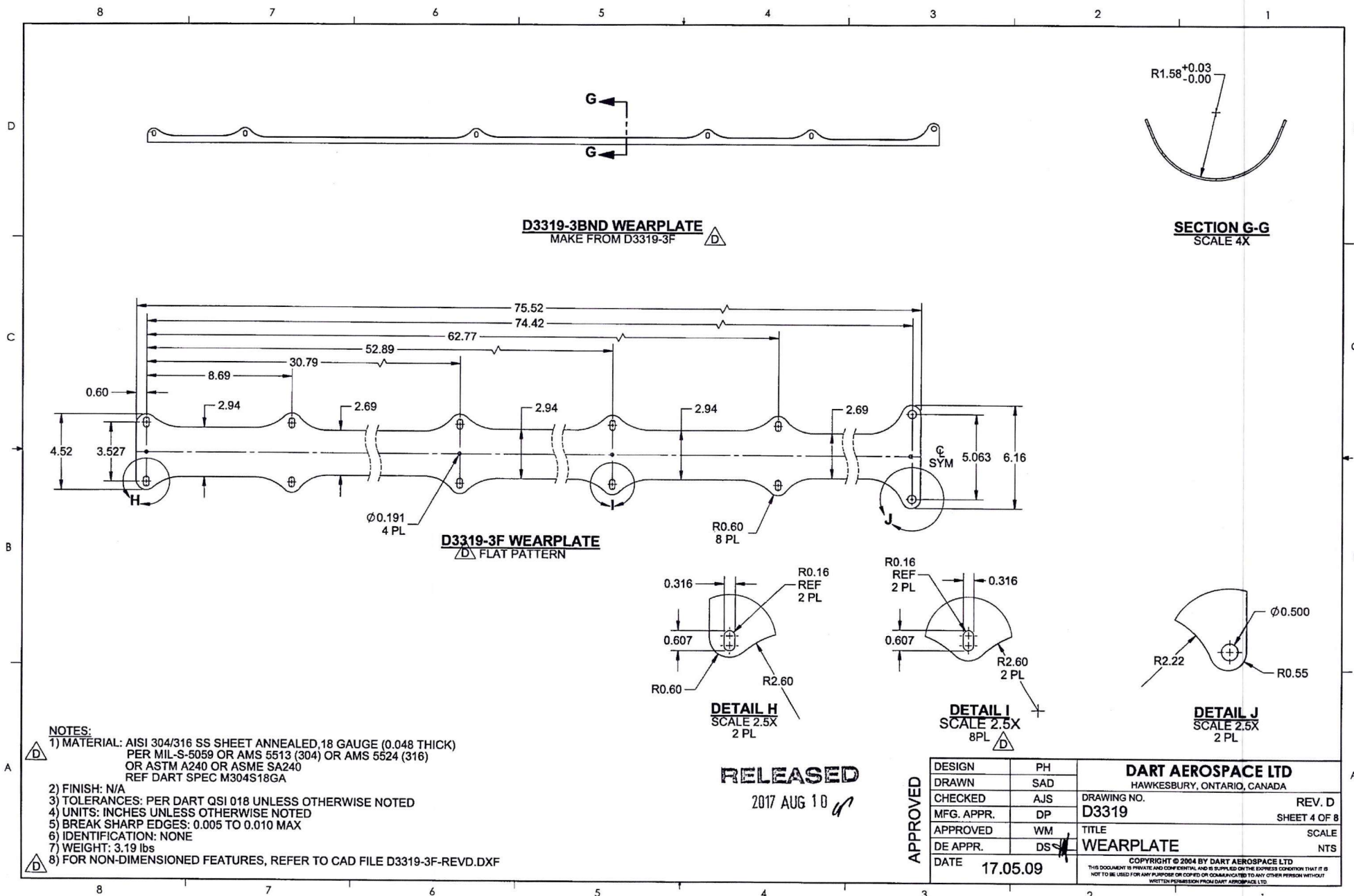
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3319-3" PER QSI 044 6.1
- 7) WEIGHT: 3.71 lbs
- 8) BUILDUP HARD SURFACE 0.06 TO 0.13 THICK USING 8259 ROD PER QSI 004 SECTION 4.5 (AUTOMATED WELDING) OR BUILDUP HARD SURFACE 0.06 TO 0.13 THICK USING 2059B ROD PER QSI 004 SECTION 4.1 (MANUAL WELDING)
- 9) COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURED COATING 0.020-0.040 THICK, PER DART QSI 005 4.9

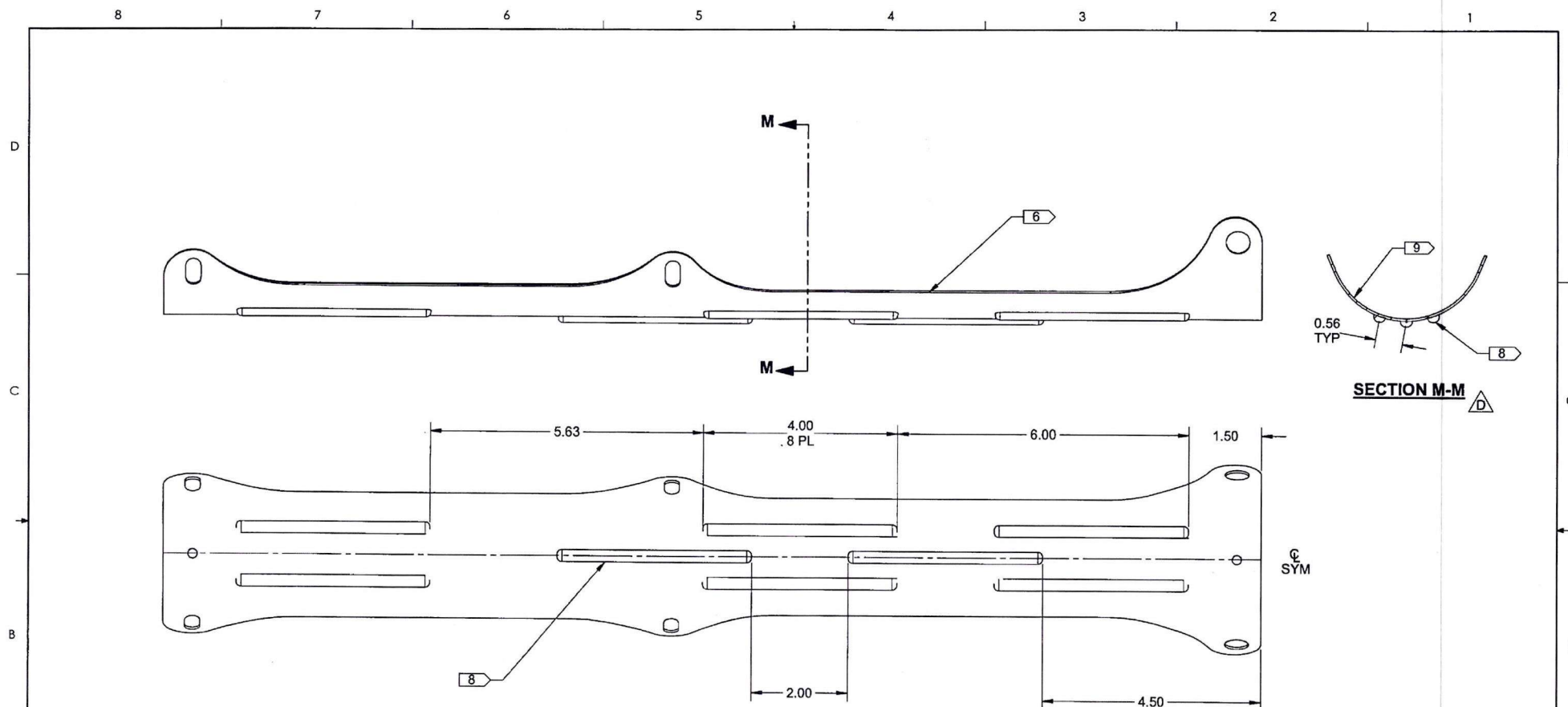
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CHECKED	AJS	DRAWING NO.	REV. D
MFG. APPR.	DP	D3319	SHEET 3 OF 8
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	WEARPLATE	NTS
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D3319-5 WEARPLATE
MAKE FROM D3319-5BND

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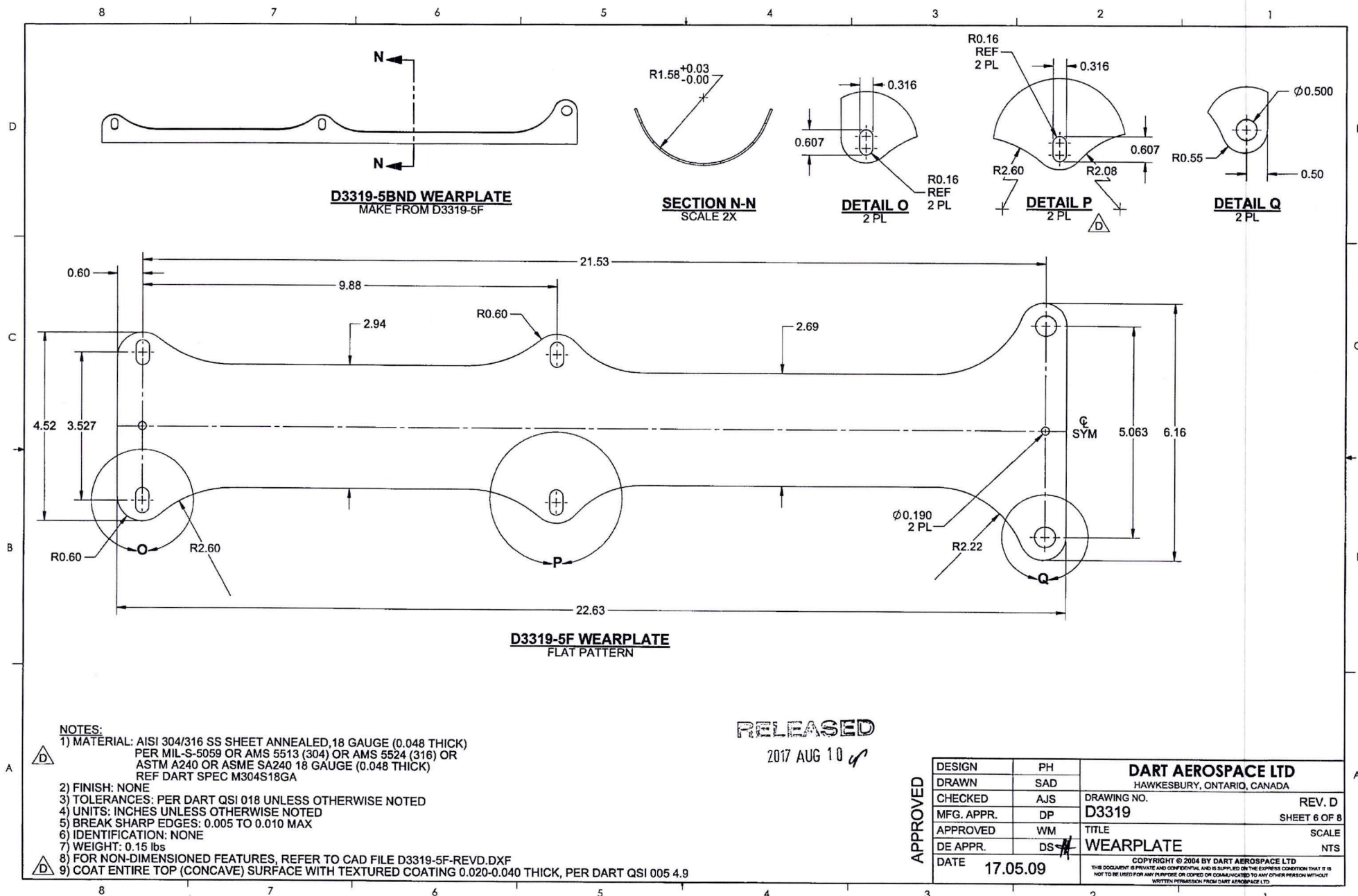
2017 AUG 10

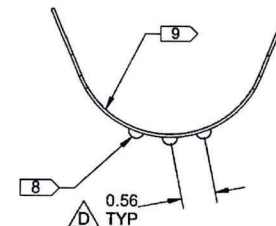
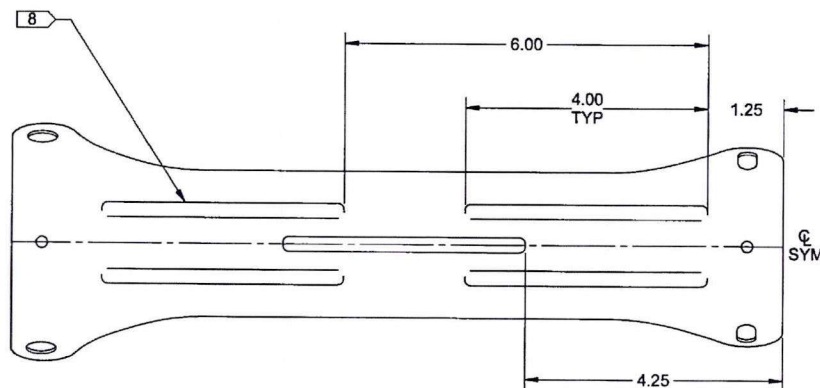
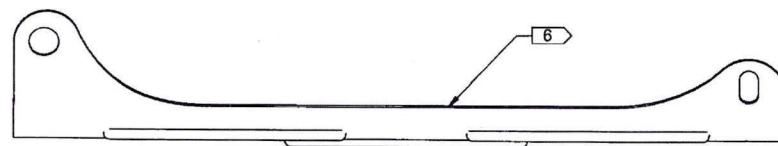
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3319-5" PER QSI 044 6.1
- 7) WEIGHT: 0.15 lbs
- 8) BUILDUP HARD SURFACING 0.06 TO 0.13 THICK USING 8259 ROD PER QSI 004 SECTION 4.5 (AUTOMATED WELDING) OR BUILDUP HARD SURFACING 0.06 TO 0.13 THICK USING 2059B ROD PER QSI 004 SECTION 4.1 (MANUAL WELDING)
- 9) COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURED COATING 0.020-0.040 THICK, PER DART QSI 005 4.9

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CHECKED	AJS	DRAWING NO.	REV. D
MFG. APPR.	DP	D3319	SHEET 5 OF 8
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	WEARPLATE	NTS
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D3319-7 WEARPLATE
MAKE FROM D3319-7BND

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2017 AUG 10

NOTES:

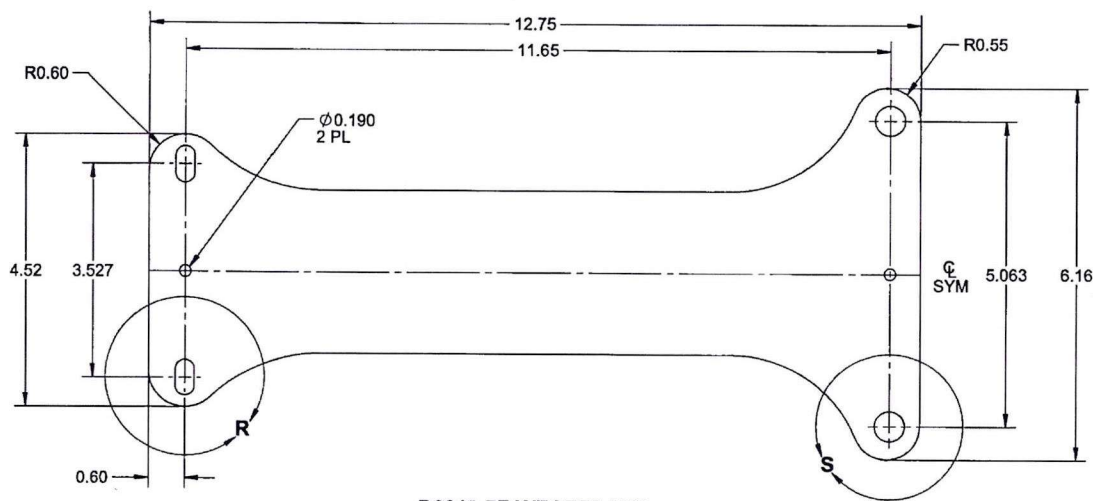
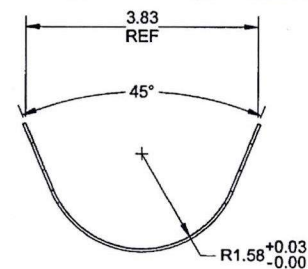
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3319-7" PER QSI 044 6.1
- 7) WEIGHT: 0.71 lbs
- 8) BUILDUP HARD SURFACING 0.06 TO 0.13 THICK USING 8259 ROD PER QSI 004 SECTION 4.5 (AUTOMATED WELDING) OR BUILDUP HARD SURFACING 0.06 TO 0.13 THICK USING 2059B ROD PER QSI 004 SECTION 4.1 (MANUAL WELDING)
- 9) COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURED COATING 0.020-0.040 THICK, PER DART QSI 005 4.9



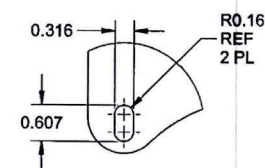
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DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SAD		
CHECKED	AJS	DRAWING NO.	REV. D
MFG. APPR.	DP	D3319	SHEET 7 OF 8
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	WEARPLATE	NTS
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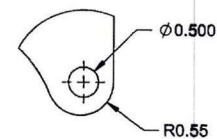
D3319-7BND WEARPLATE
MAKE FROM D3319-7F



D3319-7F WEARPLATE
FLAT PATTERN



DETAIL R
2 PL



DETAIL S
2 PL

RELEASED

2017 AUG 19

NOTES:

1) MATERIAL: AISI 304/316 SS SHEET ANNEALED, 18 GAUGE (0.048 THICK)
PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR
ASTM A240 OR ASME SA240
REF DART SPEC M304S18GA

2) FINISH: NONE

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: NONE

7) WEIGHT: 0.71 lbs

8) FOR NON-DIMENSIONED FEATURES, REFER TO CAD FILE D3319-7F-REVD.DXF

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DESIGN	PH	DART AEROSPACE LTD	
DRAWN	SAD	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AJS	DRAWING NO.	REV. D
MFG. APPR.	DP	D3319	SHEET 8 OF 8
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	WEARPLATE	NTS
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Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date : _____	Sequence #: _____	QTY Affected : _____		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled		FAULT CATEGORY ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



Container No: S150276

Part: D3319-3

Job No: 188875

Serial No/Batch: S150276

Revision: D

Inspector:

Exp Date:

Instructions: Various STC's

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawthornbury, ON K64 1K7
CANADA
TEL: 1 813 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 02/07/19